CHAPTER 3

POLLUTION PREVENTION

3-1 Scope

A) a. The Navy P2 vision is to "Support operational readiness by achieving cost effective, full and sustained compliance and enhanced personnel safety through innovative, aggressive use of pollution prevention." The P2 program is focused on meeting the requirements mandated in Executive Order (E.O.) 12856, reference (a), and E.O. 13101, reference (b), and supporting full and sustained compliance with environmental requirements at the lowest feasible life cycle cost (LCC).

R) b. This chapter provides P2 policies and procedures applicable to all Navy shore facility operations, unless otherwise specified.

R) E.O. 12856 of 3 August 1993, which mandates Federal facility compliance with the Pollution Prevention Act of 1990 and the Emergency Planning and Community Right-to-Know Act (EPCRA), applies only to Federal facilities within the customs territory of the United States. As a matter of voluntary compliance, the Navy will fully comply with E.O. 12856 and all related Navy and Department of Defense (DOD) policy on Guam.

(Note: At the time of this update, E.O. 12856 was under revision, including new and expanded requirements, new goals for reduction of HAZMAT use and toxic releases. The Chief of Naval Operations (CNO) will forward any required changes in OPNAV policy via letter and incorporate them into the next update of this instruction.)

R) c. Related information. Chapter 4 discusses procedures for implementing the Emergency Planning and Community Right-to-Know Act (EPCRA). Chapter 19 discusses P2 for ships. Chapter 2 discusses P2 in National Environmental Policy Act (NEPA) actions. Chapter 14 discusses the Navy Qualified Recycling Program (QRP), solid waste pollution prevention, solid waste reduction, and affirmative procurement for shore activities.

3-1.1 References. References are:

a. E.O. 12856 (A

b. E.O. 13101 (A

c. 40 CFR 355, Regulations for Emergency Planning and Notification Under CERCLA;

d. 49 CFR 173, Shippers - General Requirements for Shipments and Packaging;

e. 29 CFR 1910.1200, OSHA Hazard Communication Standard;

f. 40 CFR 261, Identification and Listing of Hazardous Waste;

g. 40 CFR 302, EPA Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA;

h. 40 CFR 372, Toxic Chemical Release Reporting, Regulations;

i. DOD Instruction 4715.4 of 1 July 1998, Pollution Prevention (NOTAL);

3-2 Legislation

3-2.1 Pollution Prevention Act of 1990. This Act establishes the national policy that: Pollution should be prevented or reduced at the

source whenever feasible. Pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible. Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner, whenever feasible. Disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

3-2.2 Resource Conservation and Recovery Act (RCRA). RCRA requires cradle-to-grave management of hazardous waste (HW). The Act also encourages beneficial reuse of solid waste through recycling and reuse as an energy source. The 1984 RCRA amendments require HW generators and treatment, storage, and disposal (TSD) facility owners to certify that the generator has a program in place to "reduce the volume or quantity and toxicity" of waste and that the TSD method minimizes the threat to health and the environment. In addition, the Act requires generators to report the changes in volume and toxicity of waste actually achieved during the year of the report (in comparison with previous years).

3-3 Terms and Definitions

3-3.1 Affirmative Procurement Program (APP). A program assuring Guideline items composed of recovered materials will be purchased to the maximum extent practicable, consistent with Federal law and procurement regulations.

3-3.2 Authorized Use List (AUL). The list of all hazardous material (HM) needed to support the requirements of a command or facility.

3-3.3 Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP). CHRIMP is a successful methodology to achieve life cycle hazardous material control and management (HMC&M) and P2 at the command and facility levels. The Navy CHRIMP manual provides a standardized approach and guidance for the development and implementation of centralized HMC&M practices that result in a reduction of HM procured, stocked, distributed, and eventually disposed of as waste.

3-3.4 Environmentally Preferable. Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

3-3.5 Extremely Hazardous Substance (EHS). Any substance listed in appendices A and B of reference (c).

3-3.6 Hazardous Inventory Control System (HICS). An automated product tracking and inventory system designed to facilitate the CHRIMP process on board Navy ships.

3-3.7 Hazardous Material (HM). In general, HM is any material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment. This definition includes all extremely hazardous substances, hazardous chemicals, hazardous substances, and toxic chemicals. HM is any material *regulated as HM*, per reference (d), or any material that requires a material safety data sheet (MSDS), per reference (e). HM is also any material having components which meet or have potential to meet the definition of HW per reference (f), subparts A, B, C, and D, during any phase of its existence: end use, treatment, handling, packaging, storage, transportation, or disposal.

Designation of a material as HM does not eliminate the need for adherence to hazard-specific guidance, which for control purposes, takes precedence over this instruction when a

material is separately regulated or controlled by other instructions or directives. Such materials include ammunition, weapons, explosives and explosive-actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos and mercury. These materials are HM to the extent that personnel exposure may occur during manufacture, storage, use, and demilitarization of these items.

3-3.8 Hazardous Substance (HS). Any substance listed in table 302.4 of reference (g).

3-3.9 Hazardous Substance Management System (HSMS). HSMS is an automated chemical tracking system providing "cradle-to-grave" tracking not only of the hazardous material used at a facility, but also the chemical constituents of those materials. The system facilitates Emergency Planning and Community Right-to-Know Act (EPCRA) reporting to comply with E.O. 12856. The system also provides naval activities with a tool to analyze the flow of hazardous material while developing sound P2 management techniques that (1) reduce the amount of hazardous material procured and used and (2) reduce the amount that becomes waste.

3-3.10 Hazardous Waste. A solid waste, or combination of solid wastes, that because of quantity, concentration, or physical, chemical or infectious characteristics may:

a. Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness.

b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

3-3.11 Pollution/Pollutants. Gaseous, liquid or solid by-products of industrial, agricultural or even natural processes, which after recycling, treatment, or other mitigating processes, still produce undesirable environmental effects.

3-3.12 Pollution Prevention. Source reduction and other practices that reduce or eliminate the creation of pollutants through:

a. Increased efficiency in the use of raw materials, energy, water, or other resources.

b. Protection of natural resources by conservation.

c. Reduction/elimination of the use of dangerous, toxic and hazardous materials.

d. Recycling/reuse of materials (A

Examples of P2 techniques include: (R

a. Material substitution

b. Product reformulation

c. Process change

d. Process modification

e. Process Elimination

f. Improved operation and maintenance

g. Integrated recycling.

h. Material Management

3-3.13 Pollution Prevention Equipment Program (PPEP). A program to procure and provide commercially available P2 equipment for Navy activities and to procure, demonstrate, and evaluate new technologies for Navy-wide application. (R

3-3.14 Recycled Material. Previously used materials, substitutable for a raw or source material in the manufacturing process. If not so used, this material would become waste.

3-3.15 Recycling. Using, reusing, or reclaiming materials, including processes that regenerate a material or recover a usable product from it.

3-3.16 Source Reduction. Any practice which:

a. Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, and disposal.

b. Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

3-3.17 Toxic Chemical. Any substance listed in reference (h).

3-3.18 Toxic Chemical Use Reduction. P2 actions to reduce, avoid, or eliminate the use of toxic chemicals.

3-3.19 Toxic Chemical Use Substitution. P2 actions to substitute non-toxic or less toxic chemicals in maintenance/operations/industrial processes.

3-3.20 Used/Excess HM. HM for which there is no further, immediate use aboard the ship or at the shore facility possessing the material. Another ship, shore facility or commercial industry may ultimately use such material for purposes other than those for which it was initially manufactured.

3-3.21 Waste. See "Pollution/Pollutants."

3-3.22 Waste Minimization. Source reduction and the following types of recycling:

a. Beneficial use/reuse

b. Reclamation.

Waste minimization does not include disposal or burning for energy recovery.

3-3.23 Waste Reduction. See "Waste Minimization."

3-4 Requirements

3-4.1 Navy P2 Level 1 Program Drivers (R

The Navy defines as "Level 1," those environmental requirements derived from Federal, State, or local environmental laws, regulations, or E.O.s. Level 1 program drivers for the Navy P2 program include:

a. E.O. 12856 requires Federal agencies to comply fully with the requirements of the P2 Act (PPA) of 1990 and the Emergency Planning and Community Right-to-Know Act (EPCRA). It requires Federal agencies to adopt voluntary goals for reduction of toxic releases, be proactive about source reduction, report under the Toxic Release Inventory (TRI) program, develop written facility P2 Plans, review/revise standardized documents, integrate P2 in acquisition and procurement efforts, and make life cycle cost decisions which include environmental considerations.

b. E.O. 13101, reference (b), requires Federal agencies to prevent pollution whenever feasible, incorporate waste prevention and recycling into daily operations, increase procurement of environmentally preferable items, expand existing

affirmative procurement and recycling programs, establish model facility demonstration projects, integrate P2 and affirmative procurement into acquisition programs, and establish goals for reduction of solid waste generation and increased procurement of environmental preferable items. Chapter 14 contains policy and guidance related to solid waste reduction, recycling and affirmative procurement.

c. The Resource Conservation and Recovery Act (RCRA) requires that facilities which dispose of hazardous wastes have programs in place to minimize the generation of such hazardous waste.

A) d. Other environmental statutes including the Clean Air Act and Clean Water Act include specific requirements for P2.

3-4.2 DOD Pollution Prevention Policy. Reference (i) establishes policy, assigns responsibilities, and prescribes procedures for P2.

This document requires DOD to reduce use of hazardous material (HM), generation or release of pollutants, and any adverse effects on human health and the environment. It requires selection, use and management of HM over its life cycle so that DOD incurs the lowest cost required to protect human health and the environment. DOD policy emphasizes P2 and the Pollution Prevention Act environmental management hierarchy (3-2.1) when developing solutions. DOD policy emphasizes avoiding or reducing the use of HM as the preferred method of P2. Where an activity cannot avoid the use of a HM, the directive requires the activity to follow regulations regarding use and employment of HM management practices that avoid harm to human health and the environment. This document requires emphasis on using less HM in processes and products instead of end-of-pipe management of HW. For related information, chapter 4 contains DOD policy on EPCRA and chapter 14 provides DOD policy on solid waste reduction, recycling and affirmative procurement.

3.5 Navy P2 Program Description (A

The Navy's approach to P2 is to Assess, Implement, Manage and Measure (AIMM). The Navy P2 program assesses P2 opportunities through the P2 planning process, using such tools as Model P2 Plans, P2 Planning Standard Operating Procedures, the P2 Opportunities Handbook, the Tri-Service P2 Technical Library, Navy Environmental Leadership Program (NELP), Fleet Assistance Support and Technology Transfer Team (FASTT), P2 Afloat Program, and P2 Technology Demonstrations. After careful evaluation, the Navy implements P2 opportunities through the annual Baseline Assessment process, the Navy Working Capital Fund process and the centrally managed P2 Equipment Program (PPEP). The Navy manages unavoidable and irreducible materials and waste streams through programs including the CHRIMP, the Hazardous Substances Management System (HSMS), the Navy Qualified Recycling Program (QRP), as well as regulatory permitting programs. The Navy measures progress through reporting under the Emergency Planning and Community Right to Know Act (EPCRA) and the DOD Measures of Merit.

The Navy strives for Environmental Excellence using the AIMM P2 methodology as a primary tool. Navy Environmental Excellence requires two important components, Sustained Compliance and Operational Readiness. An excellent Navy environmental quality program must both support the operational readiness of the Navy to perform its national security mission and must also achieve and maintain sustained compliance. The Navy cannot maintain readiness without compliance, and compliance without readiness is not excellence for the United States Navy. Sustained Compliance plus Operational Readiness equals Environmental Excellence, (SCORE).

The overall Navy P2 concept is to "AIMM to SCORE" to achieve environmental excellent through utilization of P2 as a tool to support sustained compliance at the lowest life cycle cost.

The Navy Environmental Quality Initiative (EQI) is an essential element in the AIMM to SCORE concept. This comprehensive initiative focuses on maximum P2 to achieve and maintain compliance. The EQI has four primary objectives:

1. Reduce the life cycle cost of the Navy's environmental quality program.

2. Achieve sustained environmental compliance at Navy activities.

3. Reduce generation of pollutants at Navy activities.

4. Increase use of P2 alternatives to meet environmental compliance requirements.

In addition to supporting the requirements of E.O.s 12856 and 13101, Navy's EQI focuses on using current P2 tools to support statutory and regulatory compliance. The EQI supports a transition from P2 planning to more comprehensive environmental quality planning, focused on lowest life cycle cost and sustainable compliance. The Navy P2 program is designed to allow Navy activities to make the best possible use of the significant assets already available such as their activity P2 plans, the PPEP, and the P2 Technical Library. Integrated environmental quality planning supports operational readiness by targeting source reduction efforts and in turn reducing regulatory and cost impacts on Navy operations.

3.6 Navy P2 Policy

The Navy shall act to prevent pollution and to decrease the release of pollutants into the environment using the methods identified in the EPA P2 hierarchy shown below:

a. Source Reduction

b. Recycling

c. Treatment

d. Disposal.

In establishing this hierarchy, the EPA stated the criteria for selecting the method depend upon the requirements of the applicable law, the level of achievable risk reduction, and the cost-effectiveness of the option. Under Navy policy, source reduction is always the most desirable option as it addresses reducing both the volume and toxicity of pollution.

The Navy shall take all necessary actions to comply with the requirements of E.O. 12856 and E.O. 13101, comply with other P2 requirements derived from applicable Federal, State and local laws and regulations, and use P2 to support full and sustained environmental compliance at Navy activities at the lowest feasible life cycle cost (LCC).

3-6.1 Pollution Reduction. All Navy facilities shall identify and implement source reduction opportunities to reduce releases of toxic chemicals to the environment, off-site transfer of such toxic chemicals for treatment and disposal, and generation and disposal of hazardous and non-hazardous solid wastes. Further, Navy facilities shall act to increase on- and off-site recycling of hazardous wastes, increase diversion of non-hazardous solid wastes for recycling or composting and increase procurement of environmentally preferable products and services.

3-6.2 Hazardous Material Control. Navy commands shall reduce the amount of HM used, and HW generated through up front HM control in procurement, supply, and use by:

a. Developing local mechanisms at shore facilities to identify materials in use that are hazardous and limiting quantities of HM procured and stored. Facilities shall establish HM AULs to control the quantity of HM procured and stored.

b. Implementing CHRIMP to reduce the amount of procured, stocked, and distributed HM eventually disposed of as waste.

c. Establishing methods for substituting a less HM or non-HM for HM where possible.

d. Developing and incorporating new technology or materials that have a reduced impact upon the environment, are safer and healthier, or result in reduced emissions.

e. Modifying HM shelf life to reduce the generation of waste because of shelf life expiration, when possible.

f. Modifying units of issue to reduce the generation of waste because of unused surplus material.

g. Review of local documentation that directs the use of HM to determine possible changes to minimize further the use of HM and generation of HW.

h. Requesting cognizant engineering authorities to modify weapon system maintenance requirement cards and technical manual requirements to reduce or eliminate the use of HM.

i Using the P2 Equipment Program (PPEP).

j. Reviewing standardized documents, including specifications and standards, to identify opportunities to stop or reduce use of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of its mission.

k. Integrating environment, safety and health (ESH) considerations into all acquisition and procurement actions.

3-6.3 Pollution Prevention Plans. Every Navy facility shall develop and implement a Pollution Prevention Plan. In it, facilities shall address the actions required to reduce pollution from all sources and to all media, and to support full and sustained compliance with environmental requirements at the lowest life cycle cost. (Note: Guidance on development of activity P2 plans is provided in the OPNAV P45 120 10 94 of October 1994)

Facilities should use their P2 Plans as a primary tool for identifying methods and means to achieve compliance with Federal, State and local environmental laws and regulations and E.O.s, enhance personnel safety, and reduce the generation and release of pollutants.

Facilities should use their P2 plans in developing and justifying funding requirements for compliance with applicable regulations and to meet applicable requirements for reducing pollution.

a. Purpose

(1) Identify activities and processes that generate pollutants, including hazardous and non-hazardous solid wastes and toxic releases to all media

(2) Develop technically and economically feasible options to reduce generation of pollutants consistent with the DOD measures of merit and associated goals

(3) Identify methods and mechanisms to use P2 as a tool to achieve full and sustained compliance with DOD and DON instructions and directives and Federal, State and local laws and regulations at the lowest feasible life cycle cost.

b. Applicability and Scope

(1) All Navy activities are required to have a P2 plan (see section 3-4.1b). Host activities shall incorporate tenant activity P2 plans within their P2 plan or oversee the independent development of a plan by the tenant command. The result must support facility-wide P2 and environmental quality planning. The commanding officer, at his or her discretion, may develop separate P2 plans for geographically non-contiguous sites.

(2) To the extent feasible, the activity P2 plan should incorporate within it related plans such as the HMC&M plan, hazardous waste minimization (HAZMIN) plan, storm water pollution prevention plan, solid waste management plan, and ozone depleting substances phase-out plan.

c. Key Plan Elements

(1) Identification of all actions and processes which generate pollutants, including hazardous and non-hazardous solid wastes and toxic releases to all media.

(2) Identification of pollutants generated by the activity, including hazardous and non-hazardous solid wastes and toxic releases to all media.

(3) Identification of compliance vulnerabilities and potential impacts on DOD measure of merit goals associated with generation of pollutants.

(4) Identification of environmental and other quantifiable costs associated with the generation of pollutants.

(5) Identification of potential alternative actions, materials, and processes, including elimination of unnecessary requirements, which will support cost effective compliance and/or support achievement of DOD measure of merit goals.

(6) Identification of priorities for implementing administrative, managerial and process improvements required to meet P2 plan goals

(7) Identification of any barriers to accomplishing P2 plan improvements, including funding, approval process, and document changes.

(8) Documentation of required administrative elements including:

(a) Methods and schedule for updating P2 plan.

(b) Methods for measuring and reporting progress.

(c) Plans to provide P2 training and techniques to establish activity-wide P2 awareness.

(d) HM management and control practices and procedures.

(e) Non-hazardous solid waste recycling and composting practices and procedures.

(f). Commanding Officer Approval and Certification

d. P2 Plan Updates:

As the guiding document for an activity P2 program, activities shall update the P2 plan on a regular basis. This update should support activity efforts to broaden the focus of the plan to integrate sustained compliance through P2, primarily source reduction.

Activities are required to review P2 plans on at least an annual basis. This review should iden-

tify any significant changes in activity mission, function and personnel; progress on actions identified in the P2 Plan; changes to compliance requirements; and changes in activity priorities. This review should be accomplished by base personnel if feasible and can be documented informally by marking up the existing P2 plan or simply adding a short update section.

Activities are required to revise their P2 Plan at least every three years. Pollution Prevention Plan revisions should focus on identification of opportunities to use P2 to meet compliance requirements and to lower overall environmental quality program life cycle costs. The revisions should include revalidation and documentation of the key plan elements identified in section 3.6.3c above. Activities shall provide a copy of the revised plan to the Naval Facilities Engineering Service Center.

e. Public Availability:

Installations should make pollution prevention plans readily available to the public. The means of providing this public access may vary widely from installation to installation, but availability only through FOIA requests is not desirable.

3-6.4 Training. One of the most effective P2 techniques is to train personnel properly on those job functions that have an environmental impact. chapter 24 provides overall environmental training requirements. Individual chapters of this manual discuss the training necessary to achieve compliance with environmental laws and regulations.

3-6.5 P2 Committee:

P2 is a multi-disciplinary effort that requires participation from many functional areas of Navy organizations to be successful. While organization environmental personnel can and should take the lead to implement P2 opportunities, successful implementation requires the participation and support of functional areas including supply, safety, systems maintenance, public works, and operational elements.

Navy organizations should establish a P2 Committee to advise the commander or commanding officer on P2. The primary responsibility of the committee should be the establishment of an integrated organizational P2 program and the development and implementation of policies and procedures required to comply with the requirement of this instruction. The P2 committee should be multi-disciplinary and bring together the various organizations and groups having functional responsibilities and authority over HM acquisition and use, etc. The commander or commanding officer should designate the chairperson of the committee and delegate him or her sufficient authority to ensure that the committee receives required participation and cooperation.

3-7 Responsibilities

3-7.1 CNO (N45) shall: (R

a. Develop and implement Navy P2 policy.

b. Identify Navy opportunities for P2 and facilitate transfer of P2 information and technology.

c. Provide guidance to major claimants and facilities to implement the Navy Pollution Prevention Program.

d. Act as the resource and assessment sponsor for all programs required to implement the requirements of the Navy P2 program including implementation of P2 efforts at Navy facilities .

e. Coordinate with Navy Program Sponsors and acquisition program managers to ensure that Navy acquisition efforts are fully compliant with environmental laws and policies

through all phases of the acquisition process including R&D, design, manufacturing, and ultimate disposal.

f. Actively participate with industry and other Services through joint initiatives to eliminate or reduce shared HM procurement, use, and requirements.

3-7.2 Commander Naval Supply Systems Command (COMNAVSUPSYSCOM) shall:

a. Assist CNO (N45) in managing the HM aspects of the Navy P2 effort and serve as the overall manager for the supply aspects of the Pollution Prevention Program.

b. Develop, implement, and maintain a Navy-wide system for acquiring only authorized HM, integrating command and shore facility HM AULs.

c. When requested, assist system command program managers by providing life cycle costs for HM being considered for acquired systems.

R) d. Develop and recommend to CNO(N45) HM shelf life policies and procedures to support the goal of eliminating disposal of unused HM as hazardous waste. Provide guidance to facility level supply functions in establishing and managing local shelf life control and management programs.

e. Provide guidance to and coordinate efforts of the Navy-wide HM substitution efforts.

R) f. Develop and recommended to CNO (N45) policies and procedures to reduce or minimize the entry of new HM into the supply system.

g. Provide Navy guidance for shore facilities and ships on implementing CHRIMP.

h. Develop and maintain Navy-wide HM/HW tracking systems (HSMS for shore activities and HICS for ships) in support of CHRIMP and to implement E.O. 12856.

i. Provide initial assistance and computer equipment to implement CHRIMP and HICS on ships to the point the ship has acquired sufficient control over a portion of their HM/HW in an operational HICS environment to sustain the operation of HICS on their ship.

j. Provide initial assistance and computer equipment to implement CHRIMP and HSMS at shore facilities to the point a facility has acquired sufficient control over a portion of their HM/HW in an operational HSMS environment to sustain the operation of HSMS at their facility.

k. Develop and implement a Regional Hazardous Material Management System (RHMMS) to ensure that Fleet and Industrial Supply Centers (FISCs) do not declare usable excess HM as excess or waste and, instead, make it available to other FISCs or activities requiring it. The aim is to reduce both waste disposal costs and additional procurement costs.

l. Support CNO(N45) in HSMS software development efforts. (R

(D

3-7.3 Commander Naval Facilities Engineering Command (COMNAVFACENGCOM) shall:

a. Support P2 initiatives as tasked by CNO (N45).

b. Assist CNO (N45) in managing P2 technology transfer efforts.

c. Serve as financial manager in support of the Pollution Prevention Equipment Procurement Program.

d. Provide technical assistance to shore facilities to implement P2 practices and incorporate P2 technology into facility processes.

e. Develop plans for implementing the use of alternative fuel vehicles in Navy vehicle fleets.

R) f. Assist COMNAVSUPSYSCOM in supporting activities in implementation and utilization of the CHRIMP program and the HSMS software system.

g. Designate the Naval Facilities Engineering Service Center (NFESC) as the central repository for all Navy Installation P2 Plans. NFESC shall collect and maintain an up to date copy of each installation's P2 plan.

A) h. In support of Navy's Environmental Quality Initiative, review all Navy P2 plans, develop and distribute lessons learned to support P2 plan updates, identify and transfer Navy-wide P2 for compliance opportunities, and support identification of P2 solutions to meet compliance requirements.

A) i. Assist CNO (N45) in development of process maps and metrics to identify and evaluate business process improvements.

3-7.4 Regional Environmental Coordinators (RECs) shall:

a. Assist CNO (N45) and COMNAVSUPSYSCOM in planning and preparation for CHRIMP and HSMS implementation.

b. Coordinate implementation efforts within their regions and serve as a point of contact for activities in managing and prioritizing implementation.

c. Serve as regional point of contact and coordinator for regional-scale P2 initiatives.

3-7.5 Major claimants shall:

a. Ensure that activities under their cognizance develop, review, revise, and implement Pollution Prevention Plans per the guidance of this chapter.

b. Ensure that activities under their cognizance provide a copy of their Installation P2 Plan, and all subsequent revisions to NFESC.

c. Plan, program, budget, and allocate funds for all facility P2 projects identified in facility Pollution Prevention Plans which support cost effective environmental compliance, support achievement of the DOD measure of merit goals, reduce generation of pollutants, or reduce the overall life cycle cost of the activities environmental program. (R

d. Plan, program, budget, and allocate funds for implementing CHRIMP and HSMS/HICS at shore activities and on ships.

e. Assist COMNAVSUPSYSCOM in implementing CHRIMP/HICS on ships and CHRIMP/HSMS at shore facilities.

f. Develop and implement HM elimination or substitution processes for all systems and operations under their cognizance. These processes shall include the identification, evaluation, and use of the least hazardous material available.

g. Develop processes to ensure that the facility AUL incorporates the least hazardous, technically acceptable materials.

h. Take necessary actions to support Navy achievement of goals established by DOD under E.O.s 12856, 13101 and any subsequent P2 E.O.s.

i. Work with acquisition program managers to aggressively pursue reduction of (R use in all systems.

j. Incorporate Environment, Safety and Occupational Health (ESOH) into the system engineering process using system safety engineering principles and practices.

k. Assess ESOH effects of chemicals, processes and materials posing a high hazard potential. Use the results in all life cycle cost and trade-off decisions.

l. Review and revise standardized documents under their cognizance, including specifications, standards, technical manuals and handbooks to reduce/eliminate requirements for hazardous material/toxic substances and other pollution sources. Reviews shall occur with sufficient frequency to take advantage of P2 opportunities created by changes to management practices, technologies, materials, processes and requirements, as appropriate. Plan, program and budget for these P2 reviews and revisions.

m. Submit P2 Program Metric data annually to CNO(N45) via the P2 Annual Data Summary (P2ADS).

R) **3-7.6 The Chief of Naval Education and Training (CNET)** shall incorporate P2 practices into Navy training, including incorporation of information on source reduction initiatives in appropriate training courses.

3-7.7 Commanders and commanding officers of shore facilities shall:

a. Develop and implement a facility Pollution Prevention Program to support implementation of Navy P2 Policy as specified in this instruction.

b. Develop and implement an activity Pollution Prevention Plan per paragraph 3-6.3. Use the pollution prevention plan as a primary tool for identifying the methods and means to reduce HM use, HW generation and toxic chemical releases, and to support cost effective, full and sustained compliance.

c. Plan, program, budget, and allocate funds for all facility P2 projects identified in facility Pollution Prevention Plans that support cost effective environmental compliance, support achievement of the DOD measure of merit goals, reduce generation of pollutants, or reduce the overall life cycle cost of the activities environmental program.

d. Update the Pollution Prevention Plan on a regular basis. P2 plan updates shall incorporate efforts to use P2 to achieve sustained compliance at the lowest life cycle cost. P2 plan updates should utilize integrated environmental quality planning to support operational readiness by targeting source reduction efforts and in turn reducing regulatory and cost impacts on Navy operations.

Review P2 Plans on at least an annual basis. This review should identify any significant changes in activity mission, function and personnel; progress on actions identified in the P2 Plan; changes to compliance requirements; and changes in activity priorities. Base personnel should accomplish this review, if feasible, and document it informally by marking up the existing Pollution Prevention Plan or simply adding a short update section.

Revise their Pollution Prevention Plan at least every three years. Pollution Prevention Plan revisions should focus on identification of opportunities to use P2 to meet compliance requirements and to lower overall environmental quality program life cycle costs. The revisions should include revalidation and documentation of the key plan elements identified in section 3-6.3c above. Activities shall provide a copy of the revised plan to the Naval Facilities Engineering Service Center.

Submit requests for waivers of this policy to CNO(N451) via the appropriate chain of command. Waiver requests should cite State and/or local requirements specifying a different update cycle or demonstrate significant savings without negative program impact.

e. Establish or revise, as necessary, and implement procedures to control, track, and reduce the variety and quantities of HM in use, in storage or stock, or disposed of as HW per the Navy CHRIMP manual. This includes establishing HAZMINCENs to facilitate the central management of all HM at a facility.

A) f. Implement HSMS at the facility. This includes identifying an MSDS, industrial type process, and EPA waste stream for each manufacturer-specific HM used within the facility. It also includes adapting previously developed process algorithms or developing new ones for each of the identified processes.

g. Develop, revise as necessary, and implement a facility level HM AUL using an inventory that identifies and quantifies HM, in cluding categorizing the material as an extremely hazardous substance, hazardous substance, or toxic chemical as defined under EPCRA (see chapter 4).

h. Limit local purchases of HM to purchases for which a stock numbered product is unavailable from the supply system and for which there is a valid controlling document (e.g., maintenance requirement card (MRC), maintenance requirement plan (MRP), technical manual, technical order, maintenance manual, or similar document). Make and control local purchases through the HAZMINCEN according to CHRIMP principles of HM management and adhere to the same requirements as any other HM stock procurement. In cases where a standard stock item appears inferior, provide complete information regarding the item to the supply officer who can then submit an HM AUL feedback report to document the apparent deficiency.

i. Ensure facility level supply functions establish and implement a local shelf life control and management program.

j. Submit P2 Program Metric data annually to the cognizant major claimant via the P2 Annual Data Summary (P2ADS).

k. Use the PEPP program to support implementation of the activity Pollution Prevention Plan and support the goals of the Navy EQI.